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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,779

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Norio Koma

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26021

7590

02/09/2005

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EXAMINER

LEE, HWA S

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/773,779	Applicant(s) KOMA, NORIO	
	Examiner Andrew Hwa S. Lee	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 77-93 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 77-93 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/721,056.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Remarks

The preliminary amendment canceling claims 1-76 and entering new claims 77-93 are noted, however, there is some confusion as the original and amended claims do not show the numbering of the claims higher than 23. For examination purposes, it is assumed all previous claims have been canceled and the new claims 77-93 are pending.

Claim Objections

Claim 1 is objected to because of the following informalities: The word "covering" in the fourth clause is misspelled. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 77-93 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,157,428. Although

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the conflicting claims are not identical, they are not patentably distinct from each other because the claims are broader except for the inclusion of “a surface of the pixel electrode facing the liquid crystal layer is substantially flat” which is well known to be a conventional design as is also disclosed as such in Figure 2 of the prior art in Applicant’s specification.

2. Claims 77-93 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 5,608,556. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are broader except for the inclusion of “a surface of the pixel electrode facing the liquid crystal layer is substantially flat” which is well known to be a conventional design as is also disclosed as such in Figure 2 of the prior art in Applicant’s specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 77-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagusa et al (US 5,859,683) in view of Lien et al (US 5,309,264).

Tagusa et al (“Tagusa” hereinafter) show a liquid crystal display comprising:

a first substrate;

a plurality of gate lines and drain lines formed on the first substrate;

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thin film transistors each adjacent to an intersection between a corresponding gate line and a corresponding drain line, and having a gate connected to the corresponding gate line, a drain connected to the corresponding drain line, and a source;

an interlayer insulation film formed covering the thin film transistors, the gate lines, and the drain lines;

a plurality of pixel electrodes each connected to the source of the corresponding thin film transistor and partially formed on the interlayer insulation film, wherein the pixel electrode is overlapped with the corresponding drain line and/or corresponding gate line;

a second substrate disposed opposing the first substrate;

a liquid crystal layer arranged between the first and second substrates;

a common electrode formed on the second substrate; and

means for providing the interlayer insulation film with a thickness sufficient to alleviate an influence on the liquid crystal layer from an electric field generated by the thin film transistors, the gate lines, and the drain lines,

wherein a surface of the pixel electrode facing the liquid crystal layer is substantially flat.

Tagusa does not expressly show the orientation dividing portion.

Lien et al ("Lien" hereinafter) show an orientation dividing portion for dividing an orientation direction of liquid crystal by generating weak electric fields and/or electric fields in a sloped direction wherein the orientation dividing portion is an orientation control window.

At the time of the invention, one of ordinary skill in the art would have modified Tagusa with Lien in order to improve the contrast of the display.

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With regards to claims 78-80, 82-84, 86-88, 90, and 91, Tagusa teaches the interlayer insulating layers are conventionally 0.5 μm and it is preferred to make the interlayer insulating thicker to 1.5 – 5.0 μm .

With regards to claims 81, 88, and 92, Tagusa teaches at least a part of each thin film transistor and/or gate line and/or drain line is disposed beneath a corresponding pixel electrode.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew H. Lee
Examiner